

## REMARKS

### Status of the claims

Claims 6, 7, 9, 49, 50, and 51 are under consideration in this application, claims 1-5, 8, and 10-48 having been withdrawn from consideration for allegedly being drawn to separate inventions and claim 51 having been added herein.

### Amendments to the Specification

In both the paragraph beginning on page 8, line 7, and the paragraph beginning on page 33, line 17, of the specification there are inadvertent errors in the range of nucleotides in SEQ ID NO:5 that constitute SEQ ID NO:2, the cDNA sequence that encodes human B7-H1 (hB7-H1). In the text on page 8, the range of nucleotides is stated to be 72-870 (page 8, line 8) and in the text on page 33, the range of nucleotides is stated to be 72-951 (page 33, line 24). The range in both cases should, as indicated in the above amendments to the specification, be 73-942. One of skill in the art, knowing that a start codon of a cDNA sequence encoding a mammalian protein is always "ATG", would know that nucleotide 72 (a "G") could not be the first nucleotide of SEQ ID NO:2. In addition, and more importantly, given the amino acid sequence of hB7-H1 (SEQ ID NO:1) in Figure 2, such a person could readily discern the location in SEQ ID NO:5 of the first and last nucleotides of SEQ ID NO:2. In light of these considerations, the above amendments to the specification add no new matter.

### 35 U.S.C. § 112, first paragraph, rejection

Claims 6-7, 9, and 49-50 stand rejected as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor, at the time the application was filed, had possession of the claimed invention. Applicant respectfully traverses the rejection.

Applicant has, as suggested by the Examiner (page 3, lines 27-28, of the Office Action), amended claim 6 to specify the range of temperatures recited on page 16, line 8, of the specification. In addition, Applicant has added dependent claim 51 specifying the temperature of 65°C.

From the comments on page 3, lines 6-28, of the Office Action, Applicant understands the Examiner's position to be that, in disclosing a range of values (i.e., a genus), a specification does not provide written description of the disclosed upper and lower limits of that range. Applicant respectfully disagrees with this position. Applicant submits that in disclosing such a range, the disclosure provides written description not only for the genus but also for, at least, the species that are explicitly disclosed as upper and lower limits.

In regard to this issue, Applicant respectfully submits that in none of the cases cited on page 3, lines 15-24, of the Office Action in support of the rejection was the matter of written description at issue one involving numerical ranges. Thus, in *Purdue Pharma L.P. v. Faulding Inc.*, 56 USPQ 2d 1481 (2000), the issue was whether a claim limitation specifying that a maximal plasma concentration of an opioid be more than twice the plasma level of the opioid at about 24 hours was supported by text in the specification reciting "formulations which do not exhibit a substantially flat serum concentration curve." *Id.*, at 1484. In *In re Ruschig*, 154 USPQ 118 (1967), the issue was whether a claim directed to a single compound not disclosed in the specification was supported by the general disclosure in the specification of the genus of compounds to which the claimed compound belonged. *Id.*, at 121-122. In *Fujikawa v. Wattanasin*, 39 USPQ 2d 1895 (1996) the issue was essentially the same as that in *Ruschig*. *Fujikawa*, at 1904-1905. In *Martin v. Mayer*, 3 USPQ 2d 1333 (1987), the issue was whether the claim term "cable" was supported by the term "wire" in the specification. *Id.*, at 1904-1905. In *Jepson v. Coleman*, 136 USPQ 647 (1963), the issue was whether, in a claim specifying a thermal blanket, limitations requiring that "headers are perpendicular to the passageways," that "one leg of the U is connected to one of said headers and the other leg to the other header," and that "all tubes are connected in parallel" were supported by text in the specification reciting "It has been found preferable to use small diameter tubing . . . and to connect this tubing to small compact headers or junction units 16, 18 rather than having large diameter header tubes extend along the edge of the blanket." *Id.*, at 650.

On the other hand, in *Union Oil Co. of California v. Atlantic Richfield Co.*, 54 USPQ 2d 1227, 1233 (2000), the Court of Appeals for the Federal Circuit (CAFC) held that the claim limitation "T50 at  $\leq 200^\circ$ " was supported by the disclosure of "no greater than  $210^\circ\text{F.}$ , . . . *but preferably . . . less than  $200^\circ\text{F.}$* " (italics in original) in the specification. In addition, the claim

limitation "RVP at  $\leq 7.0$  psi" was similarly held to be supported by the disclosure of "Reid Vapor Pressure specification of 8.0 psi . . . *even more preferably no greater than 7.0 psi*" (italics in original) in the specification. *Id.*, at 1233. In both these example, as in the instant claim 51, a specific value ( T = 200° and RVP = 7.0 psi, respectively) is included in the scope of the claim while only a range, including a recitation of the specific value, is recited in the specification. Moreover, contrary to the relevant disclosure in the present specification (page 16, line 8), in the first example above from *Union Oil*, the relevant disclosure in the specification (i.e., less than 200°F) does not even include the specific value recited in the claim (i.e., T = 200°). Yet, the CAFC held this, as well as other claim limitations at issue in the case, to be supported by the specification of the patent at issue in the case.

In light of the above considerations, Applicant respectfully submits that the specifying of 65°C in claim 51 does not constitute new matter, and hence requests that the rejection under 35 U.S.C. § 112, first paragraph, be withdrawn.

35 U.S.C. § 102(e) rejection

Claims 6-7, and 49-50 stand rejected as allegedly as being anticipated by Freeman et al. (US2002/0102651). Applicant respectfully traverses the rejection.

In view of the facts disclosed in the enclosed declaration (Exhibit A) of the inventor (Dr. Lieping Chen), Freeman et al. is not prior art with respect to the instant application and thus Applicant requests withdrawal of the rejection under 35 U.S.C. §102(e).